

MNDZHOYAN, A.L.; AGBALYAN, S.G.

Investigation on the synthesis of derived dibasic carboxylic acids.  
Dokl. AN Arm. SSR 19 no.4:111-116 '54. (MLRA 8:7)

1. Deystvit'nyy chlen Akademii nauk Armyanskoy SSR. (for Mndzhoyan)
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Carboxylic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; PAPAYAN, G.L.

Investigation on the synthesis of derived p-alkoxy benzoic acids.  
Dokl. AN Arm. SSR 19 no.5:137-142 '54. (MIRA 8:7)

1. Deystvitel'nyy chlen Akademii nauk Armyanskoy SSR. (for Mndzhoyan)
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Benzoic acid)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820006-6

MNDZHOYAN, A.L.; MNDZHOYAN, O.L.; GASPARIAN, O.Ye.

Investigation on the synthesis of derived dibasic carboxylic acids.  
Dokl. AN Arm. SSR 19 no.5:143-147 '54. (MIRA 8:7)

1. Deystvitel'nyy chlen Akademii nauk Armyanskoy SSR. (For Mndzhoyan, A.L.)
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Carboxylic acid)

MNDZHOYAN, A.L.

Scans transformed from 4-hydroxyethyl chlorides  
A. L. Mndzhoyan and V. V. Tigranyan, IRCh. Akad.  
Akad. Nauk Armenia, N.S. R., Ser. Fiz.-Mat., Elektron. i Tekhn. Ch.  
Nauk 8, No. 2, 37-42 (1957) (in Russian; Armenian summary  
42-3).—Di-Et esters of several 4-RO<sub>2</sub>C<sub>2</sub>H<sub>5</sub>CH<sub>2</sub>CH(CO<sub>2</sub>H)<sub>2</sub>  
(I) were prepd. for the 1st time thus: 300 ml. abs. EtOH  
(I) were treated with 9 g. Na metal and dried, under ethyl  
conditions. Na 7.12 g. added to the distillate with cooling.  
169.8 g. ClH(CO<sub>2</sub>Et)<sub>2</sub> and 0.04 mole 4-RO<sub>2</sub>C<sub>2</sub>H<sub>5</sub>CH<sub>2</sub>Cl added  
dropwise to the cold soln., the mixt. heated 5 hrs. on a water  
bath, the alc. distil. off, 150 ml. H<sub>2</sub>O and 150 ml. ether  
shaken with the residue and the ether layer sepd., dried over  
Na<sub>2</sub>SO<sub>4</sub>, and evapd. gave 72.0% 4-RO<sub>2</sub>C<sub>2</sub>H<sub>5</sub>CH<sub>2</sub>CH(CO<sub>2</sub>  
Et)<sub>2</sub> (II) (if the alc. is not abs., ethers may be formed).  
Et<sub>2</sub> (II) (if the alc. is not abs., ethers may be formed)  
Et, b.p./3 mm., d<sub>4</sub><sup>20</sup> and n<sub>D</sub><sup>20</sup>, resp., of II were as follows:  
Et, 174-7°, 1.0084, 1.4857; Pr, 175-80°, 1.0006, 1.4845;  
iso-Pr, 180-1°, 1.0767, 1.4833; Bu, 108-201°, 1.0016,  
1.4900; iso-Bu, 215-20° (4 mm.), 1.0027, 1.4810; 192-4m.  
210-15°, 1.0577, 1.4837. Sapon. of 0.54 mole II with KOH  
gave 31.46% I. The m.p.s. (from C<sub>6</sub>H<sub>6</sub>) of the following I  
are (R given): Me, 12-7°; Et, 133-4°; Pr, 132-3°; iso-Pr,  
124-6°; Bu, 119-20°; iso-Bu, 129-30°; iso-Am, 106°;  
4-RO<sub>2</sub>C<sub>2</sub>H<sub>5</sub>CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H, prepd. in 73-9% yield by heating  
10 g. of I in a flask in an oil bath (at 165-60° CO<sub>2</sub> evolution  
started; temp. was held at 170-6° until evolution ceased),  
had the following m.p.s. (from C<sub>6</sub>H<sub>6</sub>) (R given): iso-Pr,  
72-3°; iso-Bu, 77-8°; iso-Am, 74-6°.

MNDZHOYAN, A. I.

*Chlorosubstitution of some ethers of ester acids. A. I. MNDZHOYAN and A. A. Artyan. Izv. Akad. Nauk SSSR, Ser. Khim., 1955, No. 10, p. 2113 (in Armenian, Russian summary, 80).* A mixture of 1.2 g.  $\alpha$ -MeOC<sub>2</sub>H<sub>5</sub>CO, 30 ml. concd. HCl, and 30 ml. CH<sub>2</sub>O heated, cooled, and with HCl at 0°, then 11 g. CH<sub>2</sub>O had 10 ml. concd. HCl added, the mixture stirred at room temp. 3 hrs, the CH<sub>2</sub>O layer washed 2-3 times with cold H<sub>2</sub>O, decanted a few hrs., and dried, and the residue vacuum-distd. (1.1 ml. H<sub>2</sub>O yielded 71.5% of 4-MeOC<sub>2</sub>H<sub>5</sub>COCH<sub>2</sub>Cl, b.p. 100-114°, n<sub>D</sub> 1.5131, M.R. 47.97).

Similarly were prep'd. the following: 1,4-Me<sub>2</sub>O(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Cl (40% yield, b.p. 45° and 100° given); *E*: 73.9, 110-111°, 1.0850, 1.3110; *n*<sub>D</sub> 1.5133, 1.5136, 1.5140, 1.5141, 1.5152; *I*, 5250, 5712, 5940; *P*, 68, 115-16, 1.0561, 1.5258, 1.5731; *CH<sub>2</sub>*: 131-2°, 149.5°, 149.5°, 149.5°, 154.5°, 165.5°, 1.0349, 1.0349, 1.0350, 1.0351; *IR*: MeO(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Cl (4.25 g.), 25.5, Na<sub>2</sub>CO<sub>3</sub>, and 100 ml. H<sub>2</sub>O refluxed in a water bath 5-10 min., 13.6 g. 1,2-Me<sub>2</sub>O added in small portions during 2-3 hrs. (the most), heated 2-3 hrs., and filtered hot, and 10% HCl added to the filtrate gave 1,1,3-Me<sub>2</sub>O<sub>2</sub>C<sub>2</sub>H<sub>5</sub>CO<sub>2</sub>H, m. 270° (from EtOH). Similarly were prep'd. the analogous ethoxy-, propoxy-, isopropoxy-, and butoxyisophthalic acids, 230-30°, 214-15°, 230-1°, and 185-5°, resp. — M. C.

MNDZHOYAN, A. I.

Investigation in the Field of Derived Substituted Acetic Acids. Dok. A.N. Arm. SSR, v. 20, 1955, p 2.

Mndzoyan, A.

Derivatives of substituted acetic acids. III.  $\alpha$ -Methyl- $\gamma$ -alkylaminopropyl esters of benzyl(alkyl)acetic acids and their oxalates. A. L. Mndzoyan and G. I. Parasyan. Doklady Akad. Nauk Armenia. 3:7, 140, 82-86 (in Russian; 90-1 in Armenian) (1955). [c] preceding abstr. To verify the assumption that a high chelating effect may be achieved by a favorable combination of alkyl radicals in the title esters, 23 such compounds were prep'd.,  $\text{PhCH}_2\text{CHR}-\text{CO}_2\text{CHMeCH}_2\text{CH}_2\text{NR}$  (R, R' % yield, b.p./m.p. (°), and m.p. of the oxalate given): Me, Et, 74.0, 154-6°/3, 0.9359, 1.4300, 88-9°; Me, Pr, 70.0, 184-5°/3, 0.9404, 1.4777, 70-7°; Me, Bu, 70.0, 197-8°/3, 0.9283, 1.4782, 78-9°; Et, Et, 75.6, 153-0°/3, 0.9356, 1.4810, 94-5°; Et, Pr, 70.0, 182-00°/3, 0.9368, 1.4770, 101-2°; Et, Bu, 86.4, 201-2°/3, 0.9107, 1.4708, 78°; Pr, Et, 80.5, 100-1°/3, 0.9414, 1.4789, 88-6°; Pr, Pr, 71.0, 189-90°/4, 0.9304, 1.4753, 62-8°; Pr, Bu, 70.0, 198-9°/3, 0.9394, 1.4835, 97°; Bu, Et, 75.2, 172-3°/4, 0.9357, 1.4753, 63-4°; Bu, Pr, 71.0, 105-6°/4, 0.9278, 1.4758, 10°; Bu, Bu, 67.8, 215-16°/4, 0.9167, 1.4733, 82°; Amyl, Et, 70.0, 214-15°/4, 0.9204, 1.4779, 67-8°; Amyl, Pr, 70.0, 224-7°/4, 0.9200, 1.4780, 67-8°; Amyl, Bu, 65.6, 232-3°/3, 0.9072, 1.4748, 75-6°; iso-Pr, Et, 69.0, 195-6°/4, 0.9428, 1.4770, 18°; iso-Pr, Pr, 60.0, 203-5°/4, 0.9204, 1.4758, 42-5°; iso-Bu, Et, 70.2, 182-9°/4, 0.9202, 1.4751, 74°; iso-Bu, Pr, 68.7, 205-7°/4, 0.9226, 1.4739, 60°; iso-Bu, Bu, 65.5, 222-5°/4, 0.9210, 1.4759, 110°; iso-amyl, Et, 70.5, 172-4°/3, 0.9238, 1.4768, 70-1°; iso-amyl, Pr, 75.8, 203-5°/3, 0.9247, 1.4756, 113-14°; iso-amyl, Bu, 70.0, 210-14°/3, 0.9124, 1.4746, 94-5°. The water sol. hydrochlorides, methiodides, and ethiodides of these esters are prep'd. (c) Lands, C.A. 45, 97192.

MNDZHOVAN, A. L.

USSR/ Medicine - Pharmacology

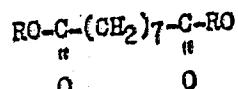
Card 1/2 Pub. 21a - 3/5

Authors : Mndzhovan, A. L., Active Member, Acad. of Sc., Arm. SSR; and  
Gasparyan, O. Ie.

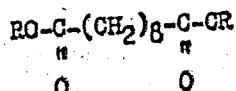
Title : A study of derivatives of diabasic carboxylic acids

Periodical : Dok. AN Arm. SSR 20/1, 11-16, 1955

Abstract : Experiments are described with dialkyl-amino-alkyl esters of  
azelaic and sebacic acids of the following types:



and



Institution : Acad. of Sc., Arm. SSR, the laboratory of pharmaceutical chemistry

Submitted : August 24, 1954

Card 2/2 Pub. 21a - 3/5

Periodical : Dok. AN Arm. SSR 20/1, 11-16, 1955

Abstract : The experiments were conducted to determine the higher homologs which might produce the maximum pressure effect (as found in previous work) on animal and human specimens. Six references: 3 USSR, 3 USA (1921-1949). Tables.

MNDZHOGYAN, A. L.

USSR/Chemistry - Pharmacology

Card 1/1 Pub. 21a - 4/5

Authors : Mndzhoyan, A. L., Active Member, Acad. of Sc., Kaz. SSR; and

Title : Mndzhoyan, O. L.  
Investigations in the region of derivatives of substituted acetic acids

Periodical : Dok. AN Arm SSR 20/1, 17-27, 1955

Abstract : The composition and the structure of 1,3-di(diacylamino)-propyl esters and some disubstituted acetic acids was studied. This information is of importance in determining the physiological activity and, sometimes, selectivity during the synthesis of amino-esters of any class of organic compounds in that they depend strongly on the compositive and the structure of the amino-esters employed. Tables.

Institution : Acad. of Sc., Arm. SSR, Laboratory of Pharmaceutic chemistry

Submitted : August 24, 1954



MNDZHOYAN, A.L.; PAPAYAN, G.L.

Investigation in the field of derived substituted acetic acids.  
Dokl. AN Arm. SSR 20 no.3:87-91 '55. (MLRA 8:7)

1. Deystvitel'nyy chlen AN Armyanskoy SSR. (for Mndzhoyan)  
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy  
SSR. (Acetic acid)

MNOZHOYAN, R.L.

Derivatives of substituted acrylic acids. IV.  $\alpha$ -Methyl- $\omega$ -dimethyl- $\gamma$ -alkylaminopropyl esters of twice substituted acrylic acids. A. L. Minasyan, Dzhadzhy And. Nana Arayan, J.S. Krikorian (USSR); cf. preceding article. The  $R_2NCH_2CH_2O$  group is not indispensable in the synthesis of cholinolytic products. The physicochemical properties of synthesized "cholinolytic compounds" are given in which the  $R_2NCH_2CH_2O$  group has been replaced by  $R_2NCH_2CH_2CHMeO$  and  $R_2NCH_2CHMeCHMeO$  (where  $R$  is alky). They are similar in structure to Tramadol which along with atropine is being used as standard in assaying the ipsozymolytic activity of new compounds.

A. S. Mirkin

2  
0  
0

REJ/SP

MNDZHOVAN, A. L.

Derivatives of benzimidazole. II. Some 2-benzylalkyl-methylbenzimidazoles. A. L. Mndzhoyan, V. G. Afrikyan, and G. L. Papayan. Doklady Akademii Nauk SSSR, 20, 133-7 (1955); cf. C.A. 49, 109324. —The following e-

$C_6H_5N(C(CH_2Ph)_2)NH$  were prep'd. (R, % yield, and m.p. given): Me, 83.1, 103-4°; Et, 83.3, 108-0°; Pr, 70.4, 100-7°; Iso-Pr, 66.1, 203-10°; Bu, 66.6, 189-90°; Iso-Bu, 61.8, 185-6°; Am, 63.6, 203-4°; Iso-Am, 62.8, 211-12°. The compds. are cholinolytic.

A. S. Mirkin

PM  
pk

MNDZHOYAN, A.L.; MNDZHOYAN, O.L.; OGANDZHANYAN, N.M.

Investigation in the field of derived 2-substituted acetic acid.  
Dokl. AN Arm. SSR 20 no.5:181-184 '55. (MLRA 8:7)

1. Deystvitel'nyy chlen Akademii nauk Armyanskoy SSR. (for Mnizhoyan, A.L.)
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Acetic acid)

MNDZHOYAN, A. L.

CH

*Synthesis of derivatives of  $\beta$ -alkoxybenzoic acids. X. 2-Dialkylaminoethyl thioesters of  $\beta$ -alkoxybenzoic acids and their quaternary salts. A. L. Mndzhoyan, V. G. Afrikyan, and A. A. Dokhikyan. Dostroy Armen. Nauk Armen. S.S.R. 21, 27-32 (1958) [in Russian; Armenian summary]; cf. C.A. 50, 246a, 4073g. — The following esters are reported for pharmacological tests.  $\delta$ -RO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>C(O)SCH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub> (R, % yield, b.p., d<sub>40</sub>, n<sub>D</sub><sup>20</sup>, and m.p. of HCl salt shown): Me, 70.6, b.p. 170-2°, 1.4147, 1.6680, 173°; Et, 79.2, b.p. 178-80°, 1.0987, 1.5888, 152°; Pr, 61.5, b.p. 180°, 1.0735, 1.5466, 148°; iso-Pr, 70.1, b.p. 182-4°, 1.0735, 1.5484, 129°; Bu, 62.7, b.p. 210°, 1.0584, 1.5385, 142°; iso-Bu, 68.5, b.p. 200°, 1.0581, 1.5388, 148°; Am, 73.5, b.p. 195-6°, 1.0614, 1.5432, 124°; iso-Am, 81.3, b.p. 183-5°, 1.0444, 1.5399, 110°; RO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>C(O)SCH<sub>2</sub>CH<sub>2</sub>N*Et*: Me, 64.5, b.p. 215°, 1.0788, 1.5492, 119°; Et, 72.3, b.p. 186-8°, 1.0571, 1.5454, 190°; Pr, 70, b.p. 188-90°, 1.0436, 1.5351, 133-3°; iso-Pr, 63, b.p. 195°, 1.0440, 1.5405, 148-9°; Bu, 63.6, b.p. 188-90°, 1.0333, 1.5340, 131°; iso-Bu, 64-3, b.p. 210-12°, 1.0243, 1.5340, 180-1°; Am, 60, b.p. 195°, 1.0229, 1.5332, 94°; iso-Am, 86.4, b.p. 200°, 1.0355, 1.5352, 148-9°;  $\delta$ -RO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>(CO)-SCH<sub>2</sub>CH<sub>2</sub>N*Me*<sub>2</sub>R'F (R, R', and m.p. given): Me, Me, 233-4°; Me, Et, 207-8°; Et, Me, 218-19°; Et, Et, 172-3°; Pr, Me, 203°; Pr, Et, 153-4°; iso-Pr, Me, 208-9°; iso-Pr, Et, 155-6°; Bu, Me, 201-2°; Bu, Et, 149-60°; iso-Bu, Me, 212°; iso-Bu, Et, 160°; Am, Me, 182-3°; Am, Et, 148-7°; iso-Am, Me, 166-7°; iso-Am, Et, 125-6°;  $\delta$ -RO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>C(O)SCH<sub>2</sub>CH<sub>2</sub>N*Et*<sub>2</sub>R'F; Me, Me, 193°; Me, Et, 153°; Et, Me, 159°; Et, Et, 135°; Pr, Me, 167-8°; Pr, Et, 160-1°; iso-Pr, Me, 178-9°; iso-Pr, Et, 190°; Bu, Me, 130°; Bu, Et, 160-2°; iso-Bu, Me, 174-5°; iso-Bu, Et, 181-2°; Am, Me, 132-3°; Am, Et, 160°; iso-Am, Et, 170-1°; iso-Am, Et, 120-1°.*

G. M. Kosolapoff

MNDZHCHAN A.L.

*Derivatives of  $\beta$ -alkoxybenzoic acids. XI. 1-Methyl-3-diethylamino-propiothio esters of  $\beta$ -alkoxybenzoic acids and their quaternary salts. A. L. Mndzhyan, V. G. Arayyan, S.S.R. 21, No. 3, 121-8 (1955); cf. C.A. 50, 4845c.—The following substances were prepd. for biological tests (no details of procedures):  $\rho$ - $ROCH_2CO SCH_2Me$  of HCl salt shown): Me, 42, 188-9°/2, 1.0840, 1.5540, 168°; Et, 68.4, 200°/4, 1.0243, 1.5340, 121°; Pr, 40, 212°/5, 1.0512, 1.5120, 144°; iso-Pr, 60, 187-90°/3, 1.0452, 1.5305, 103°; Bu, 48, 225°/4, 1.0400, 1.6350, 140°; iso-Bu, 60, 205°/3, 1.0707, 1.5470, 120°; Am, 60, 233°/4, 1.0297, 1.5330, 139-0°; iso-Am, 50.5, 215-20°/4, 1.0270, 1.5330, 143°;  $\rho$ - $ROCH_2C(O)SCH_2CH_2CH_3$ , 93°; Et, 60, b.p. 22°, 1.0125, 1.5300, 129°; Pr, 54.5% 192-5°/1, 1.0310, 1.5313, 106°; iso-Pr, 50, 225°/5, 1.0278, 1.5310, 115-10°; Bu, 58, 235°/3, 1.0177, 1.5280, 120°; iso-Bu, 43.3, 210°/5, 1.0138, 1.5290, 118°; Am, 60, 245°/4, 1.0142, 1.5250, 100°; iso-Am, 45, 220°/2, 1.0064, 1.5245, 90°;  $\rho$ - $ROCH_2C(O)SCH_2MeCH_2CH_3$ , NEt<sub>2</sub>R' (R, R', m.p., resp.): Me, Me, 128-0°; Et, Me, 131-2°; Et, Et, 144-5°; Pr, Me, 130-10°; iso-Pr, Me, 142-3°; iso-Pr, Et, 90-100°; Bu, Me, 130-4°; Bu, Et, 141-2°; iso-Bu, Me, 140-1°; iso-Bu, Et, 120-1°; Am, Me, 130-40°; iso-Am, Me, 132-3°;  $\rho$ - $ROCH_2C(O)SCH_2Me$ ,  $CH_2CH_2NM_2CR'R''$  (R, R', and m.p. given): Me, Me, 107-8°; Me, Et, 144-5°; Et, Me, 169-70°; Et, Et, 146-7°; Pr, Me, 170-1°; Pr, Et, 126-7°; iso-Pr, Me, 150-7°; iso-Pr, Et, 114-15°; Bu, Me, 161-5°; Bu, Et, 135-6°; iso-Bu, Me, 168-9°; iso-Bu, Et, 154-5°; Am, Me, 159-60°; Am, Et, 122-3°; iso-Am, Me, 160-1°; iso-Am, Et, 118-19°.*

G. M. Kosolapoff

MNDZHCHAN, A.L.; MNDZHOYAN, O.L.

Investigation of substituted acetic acid derivatives. Dokl. Akad. Nauk SSSR 21 no. 3:129-131 '55.  
(MLRA 9:2)

1. Deystvitel'nyy chlen AN Armyanskoy SSR (for Mndzhyan, A.L.)
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.

(Acetic acid)

Mardzhan, A.

*Chem.*  
Derivatives of dibasic carboxylic acids. XI. 3-Dialkylaminoacetyl esters of some thiodicarboxylic acids.  
M. M. Mamedova and S. G. Arshilov. Doklady Akad. Nauk Armjan. SSR. 21, 171-6 (1955) (in Russian); cf. C.A. 50, 5530a. The following esters were prep'd. without description of procedures.  $S(CH_3CO_2CH_2CH_2CH_2NR_2)_2$  ( $R$ , % yield, b.p./mm.,  $d_{25}^{25}$ ,  $n_{D}^{25}$ , resp., shown):  $Me_2$ , 39.5, 187-8°, b.p. 1.0356, 1.4703 (citrate, m. 76°);  $Et_2$ , 44.8, 203-4°;  $b_1$ , 1.0254, 1.4660 (oxalate, m. 147°);  $S(CH_3CH_2CO_2CH_2CH_2NR_2)_2$ ;  $Me_2$ , 46.4, 210-11°;  $b_1$ , 1.0421, 1.4720 (oxalate, m. 81°);  $Et_2$ , 58, 222-4°/5, 1.0198, 1.4712 (citrate, m. 78°).  $S(CH_3CO_2CH_2CH_2CH_2NR_2)_2$ ;  $Me_2$ , 51.3, 207-8°/5, 1.0279, 1.4705 (oxalate, m. 151°);  $Et_2$ , 59.7, 214-15°/5, 1.0002, 1.4664 (citrate, m. 81°).  $S(CH_3CH_2Me_2CO_2CH_2CH_2CH_2NR_2)_2$ ;  $Me_2$ , 62, 210-19°/3, 1.0028, 1.4632 (citrate, m. 81°);  $Et_2$ , 65.7, 215-17°/3, 0.9932, 1.4630 (citrate, m. 80°).

C. M. Kovaloff

*Mndzoyan, A. I.*

4  
0  
0

*Derivatives of dibasic carboxylic acids. XII. Dialkylaminoalkylamides of some thiobasiccarboxylic acids.*  
*Mndzoyan and S. G. Asbalyan. Doklady Akad. Nauk Armenia, 1955, R. 24, No. 5, 218-22 (1955) (in Russian); cf. C.A. 50, 6630c. — The following compds. were prep'd. for biol. evaluations.  $S(CH_2CONHCH_2CH_2NR_2)_2$  ( $R$ , % yield, b.p./5 mm., m.p., d<sub>4</sub>^20, resp. shown): Me, 41.2, 178-81°, 53-4°, — (oxalate, m. 121°); Et, 50.6, 183-4°, —, 1.0506, 1.4720 (oxalate, m. 120°).  $S(CH_2CONHCH_2CH_2NR_2)_2$ : Me, 60.5, 192-5°, —, — (oxalate, m. 101°); Et, 64.8, 198-200°, —, 1.0375, 1.4723 (citrate, m. 95°).  $S(CH_2CH_2CONHCH_2CH_2NR_2)_2$ : Me, 63.5, —, 71°, — (oxalate, m. 118°); Et, 65.6, 204-6°, —, 1.0305, 1.4952 (citrate, m. 98°).  $S(CH_2CH_2CONHCH_2CH_2CH_2NR_2)_2$ : Me, 64.8, 209-12°, 51-2°, — (citrate, m. 111°); Et, 61.7, 176°, —, 1.063, 1.4830 (citrate, m. 81°).  $S(CHECONHCH_2CH_2CH_2NR_2)_2$ : Me, 55.1, 178-80°, 60-2°, — (citrate, m. 104°); Et, 55.8, 187-92°, 64-6°, 1.0232, 1.4828 (citrate, m. 109°).  $S(CHECONHCH_2CH_2CH_2NR_2)_2$ : Me, 58.3, 195-8°, —, 1.0407, 1.4791 (oxalate, m. 160°); Et, 50, 180-1°, —, 1.0318, 1.4803 (citrate, m. 83°).  $S(CH_2CHMe_2)_2CONHCH_2CH_2NR_2$ : Me, 61.4, 194-6°, 56-7° (citrate, m. 113°); Et, 70.9, 198-200°, —, 0.9933, 1.4670 (oxalate, m. 129°).  $S(CH_2CHMe_2)_2CONHCH_2CH_2CH_2NR_2$ : Me, 67.2, 207-10°, 60-01°, — (citrate, m. 117°); Et, 70, 203-11°, —, 0.9931, 1.4667 (citrate, m. 116°).*

*G. M. Kusol'tsoff*

*Deystvitel'nyy Chlen*  
*AN Arm. SSR*

*PM*

*MHDZHOYAN, A.L.*

5

Derivatives of substituted acidic acids VIII. 2-Dimethylamino-2-(dimethylpropyl) esters of 1,4-methylenepropionic acids. A. L. MHDZHOYAN, V. G. AFRIKYAN, Yu. O. MARTIROSYAN. Izdat. Akad. Nauk S. S. R. 21, No. 6, 222-6 (1960) in Russian). cf. C. A. 50, 9332c. The following potentially cholinolytic substances were prepared: no exptl. details are given.  $\delta$ - $YC_6^H_5CH_2CO_2CH_2CM_2CH_2NR_2$  ( $Y$ - $R$ , % yield, n.p./mm., d<sub>4</sub><sup>20</sup>, m.p. or t.m., resp., given):  $H_2Me$ , 80.4, 105.7°/2, d<sub>4</sub><sup>20</sup> 0.9629, m.p. 1.3850 (HCl salt, —, acetate, m. 103-4°, methiodide, m. 105-0°);  $Me_2Me$ , 88, 185.7°/2, m.p. 0.9880 (HCl salt, m. 101-9°);  $Bu_2Me$ , 82.5, 188.0°/2, d<sub>4</sub><sup>20</sup> 0.9841 (acetate, m. 122-3°);  $Me_2Bu$ , m. 119°;  $Pr_2Bu$ , m. 82.5, 145.0°/2, d<sub>4</sub><sup>20</sup> 0.9840 (acetate, m. 122-3°);  $Me_2Bu$ , m. 97-8°, methiodide, m. 80-0°;  $t-Bu_2PrO$ , m. 80.2, 100-1°/4, d<sub>4</sub><sup>20</sup> 0.9760, acetate, m. 113°;  $t-BuO_2Me$ , 80.5, 205.7°/3, d<sub>4</sub><sup>20</sup> 0.9712, acetate, m. 113°;  $t-BuO_2Bu$ , m. 70-1°, acetate, m. 103-4°; methiodide, m. 125°;  $t-BuO_2Pr$ , m. 84.2, 202-1°/2, d<sub>4</sub><sup>20</sup> 0.9839, acetate, m. 125°;  $t-Bu_2PrO$ , m. 84.2, 202-1°/2, d<sub>4</sub><sup>20</sup> 0.9839, acetate, m. 116-17°; methiodide, m. 100-10°;  $t-Bu_2PrO$ , m. 80.8, 222-7°/6, d<sub>4</sub><sup>20</sup> 0.9779, acetate, m. 116-16°;  $t-Bu_2PrO$ , m. 80.4, 180-1°/3, d<sub>4</sub><sup>20</sup> 0.9613, m.p. 1.4807 (HCl salt, m. 66-6°);  $t-Bu_2PrO$ , m. 84.7, 205.7°/3, d<sub>4</sub><sup>20</sup> 0.9807, m.p. 1.4020 (HCl salt, m. 84-5°);  $t-BuO_2Bu$ , m. 78.1, 204-1°/4, d<sub>4</sub><sup>20</sup> 0.9779, m.p. 0.9779, m.p. 1.4008, P.D. 78.1, 204-1°/4, d<sub>4</sub><sup>20</sup> 0.9779, m.p. 1.4870-0.9708, m.p. 1.4800,  $t-BuO_2Pr$ , m. 84.1, 220-1°/3, d<sub>4</sub><sup>20</sup> 0.9779, m.p. 1.4001 (HCl salt, m. 83-4°);  $t-Bu_2PrO$ , m. 77.5, 204-1°/3, d<sub>4</sub><sup>20</sup> 0.9837, m.p. 1.4802,  $t-Bu_2PrO$ , m. 88.2, 222-1°/4, d<sub>4</sub><sup>20</sup> 0.9880, m.p. 1.4840 (HCl salt, m. 83-4°).

*M. A. YOUNG  
2 copies.*

*MHDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.G.; MARTIROSYAN, Yu.O.*

5-benzylfuran-2-carboxylic acid. Sint.geterotsikl.soed. no. 1:11-13  
156. (Furan) (Furoic acid) (MIRA 10:11)

ANNE HCYAN, etc.

MHDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.G.; MARTIROSYAN, Yu.O.

3(5'-benzylfuryl-2')-5-mercaptoptriazole-1,2,4. Sint.geterotsikl.  
soed. no.1:13-15 '56. (MIRA 10:11)  
(Triazole)

MNDZHOYAN, A.L.

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.G.; MARTIROSYAN, Yu.O.

5-bromofuran-2-carboxylic acid. Sint.geterotsikl.sosed.no.1:15-17 '56.  
(MIRA 10:11)

MNDZHOYAN, A.L.

MNDZHOYAN, A.L.; GRIGORYAN, M.T.; BABIYAN, N.A.; OGANDZHANYAN, N.M.

5-diethylaminomethylfuryl-2-carbinol. Sint.geterotsikl.soed.  
no.l:20-21 '56.  
(Forfuryl alcohol) (MIRA 10:11)

MHDZHOYAN, A.L.; AFRIKYAN, V.G.; DOKHIKYAN, A.A.; TATEVOSYAN, G.T.;  
DIVANYAN, N.M.

Methyl ester of 5-benzylfuran-2-carboxylic acid. Sint.geterotsikl.  
soed. no.1:22-23 '56. (MIRA 10:11)  
(Furoic acid)

MNDZHOYAN, A.L.

MNDZHOYAN, A.L.; DIVANYAN, N.M.; MNDZHOYAN, O.L.; BAGDASARYAN, E.P.

Methyl ester of 5-butylmercaptomethylfuran-2-carboxylic acid.  
Sint.geterotsikl.soed. no.1:26-27 '56. (MIRA 10:11)  
(Furoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.T.; MNDZHOYAN, O.L.; GASPARYAN, O.Ye.

Methyl ester of 5-diethylaminomethylfuran-2-carboxylic acid. Sint.  
geterotsikl.sosed. no.l:28-29 '56. (MIRA 10:11)  
(Furoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.T.; TATEVOSYAN, G.T.;  
AGBALYAN, S.G.

Methyl ester of 5-methylfuran-2-carboxylic acid. Sint.geterosikl.  
soed. no.1:30-31 '56. (MIRA 10:11)  
(Furoic acid)

MNDZHOYAN, A.L.; GRIGORYAN, M.T.; TATEVOSYAN, G.T.; AGBALYAN, S.G.

Methyl ester of 5-chloromethylfuran-2-carboxylic acid. Sint.  
geterotsikl.soed. no.1:36-38 '56. (MIRA 10:11)  
(Furoic acid)

MNDZHOYAN, A.L.; TATEVOSYAN, G.T.; AFRIKYAN, V.G.; PAPAYAN, G.L.

2-methylfuran (Silvan). Sint.geterotsikl.soed. no.l:39-41 '56.  
(Furan) (MIRA 10:11)

MIN 224 4624 22

MNDZHOYAN, A.L.; GRIGORYAN, M.T.; TATEVOSYAN, G.T.; AGBALYAN, S.G.

'56. 5-methylfuran-2-carboxylic acid. Sint.geterotsikl.soed. no.1:42-43  
(Furoic acid) (MIRA 10:11)

MNDZHOYAN, A.L.; AFRIKYAN, V.Q.; MNDZHOYAN, O.L.; BABIYAN, N.A.

3-(2'-furyl)-5-mercaptoptriazole-1,2,4. Sint.geterotsikl.sosed.

no.l:59-60 '56.

(Triazole)

(MIRA 10:11)

MEDZHOTAN, A.L.; AFRIKYAN, V.G.; BABIYAN, N.A.; MANUCHARYAN, S.S.

Furoyl-2-thiosemicarbazide. Sint.geterosikl.soed. no.1:60-62 '56.  
(Semicarbazide) (MIRA 10:11)

MNDZHOYAN A.L.

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.T.; TATEVOSYAN, G.T.;

AGHALYAN, S.G.  
5-methylfuran-2-carboxylic acid chloride. Sint.geterotsikl.soed.  
no.1:67-68 '56. (Furoic acid) (Chlorides) (MIRA 10:11)

Бюл. № 47

МНДЗХОЯН, А.Л.; АФРИКЯН, В.О.; ГРИГОРЯН, М.Т.

Furan-2-carboxylic acid chloride. Sint.geterotsikl.soed. no.1:68-69  
'56. (MIRA 10:11)  
(Furoic acid) (Chlorides)

MNDZHOYAN, P.L.

MNDZHOYAN, A.L.; GRIGORYAN, M.T.; MNDZHOYAN, O.L.; BAGDASARYAN, E.P.

$\beta$ -chloroethyl ester of furan-2-carboxylic acid. Sint. geterotsikl.  
soed. no.1:74-75 '56. (MIRA 10:11)  
(Furoic acid)

MNDZHOYAN, A.L.; GYUL'BUDAGYAN, L.V.

Some  $\alpha, \beta$ -dimethyl- $\gamma$ -dialkylaminopropyl esters of para-alkoxy benzoic acids. Izv. AN Arm. SSR. Ser. Fiz.-nauk 9 no. 10:37-43 '56.  
(MIRA 10:4)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.  
(Esters) (Benzoic acid)

*MNDOYAN A.*

---

Derivatives of dibromo-*o*-nitrophenylsuccinic acid. XIII. DL-

A. I. Mintsroyan, O. L. Mintsroyan, and V. S. Tashirov  
Soviet Academy of Agricultural Sciences, Institute of Soil Science  
(1980) (in Russian). *J. C. S. Perkin Part II*, No. 1, 23-5  
Reducing 45 g succinic anhydride with 31 g abs. ROH 1  
hr gave 45.3%  $\text{HOOCCH}_2\text{CO}_2\text{H}$ , b.p. 123°. This (25 g)  
and 20 g  $\text{SOCl}_2$  kept overnight, then heated 3 hrs. of 50-  
10% aqueous  $\text{ZnO-Cu-CuCO}_3$ , b.p. 99-01°. This with  
 $\text{MeNCCH}_2\text{NH}_2$ , m. C. 5.5%,  $\text{HOOCCH}_2\text{CONHCCH}_2\text{NH}_2$ ,  
 $\text{HOOCCH}_2\text{CH}_2\text{NH}_2$ , b.p. 145-7°, d.p. 103.7, IV, 401,  
 $\text{HCl}$ , m. m. 195-6°, *oxalate*, m. 189-90°, *methiodide*,  
m. 234-6°, *chloride*, m. 202-3°. The following esters were  
similarly obtained (esters of yield, b.p., d.p., and deriv.)  
and their m.p.: *benzoate*, m. 23, b.p. 118-20°, 1.0871, 1.467;  
*HG*, m. 172-3°, *oxalate*, 190-1°, *methiodide*, m. 300-  
1.449; *chloride*, m. 204-5°, *P*, 71°, b.p. 132-3°, 1.0187,  
m. 202-3°; *benzoate*, m. 192-3°, *oxalate*, m. 183-4°, *methiodide*,  
m. 262-3°, *chloride*, m. 204-5°, *P*, 44°, b.p. 121-3°;  
*methiodide*, m. 230-3°, *chloride*, m. 189-1°, *P*, 67.4  
b.p. 120-7°, 1.0278, 1.4033; *HCl salt*, m. 103-4°, *oxalate*, m.  
180-4°, *methiodide*, m. 285-6°, *chloride*, m. 203-0°,  
*P*, b.p. 28, b.p. 127-8°, 1.0038, 1.404; *HCl salt*, m. 180-1°,  
*oxalate*, m. 102-3°, *methiodide*, m. 289-90°, *chloride*, m.  
208-10°, *P*, 72.7°, b.p. 125-8°, 0.9902, 1.440; *HCl salt*,  
m. 104-6°, *oxalate*, m. 187-8°, *methiodide*, m. 273-4°,  
*chloride*, m. 180-7°, 1.044, 0.1, b.p. 143-1°, 0.9986,  
1.447; *HCl salt*, m. 178°, *oxalate*, m. 102-4°, *methiodide*,  
m. 283°, *chloride*, m. 201-2°, *P*, 65°, b.p. 130-50°, 1.0336, 1.4035; *HCl salt*, m. 188-9°, *oxalate*, m.  
101-2°, *methiodide*, m. 274-5°, *chloride*, m. 104-5°.

1/2

MNDZHOYAN, A.L.; DOVLATYAN, V.V.; DIVANYAN, N.M.

Investigations in the field of dibasic carboxylic acid derivatives.  
Part 14. Amino esters of p-phenylenedicarboxylic and p-phenylene-  
acidic acids and their quaternary salts. Dokl.AN Arm.SSR 22 no.2:  
65-69 '56. (MLRA 9:7)

1. Deystvitel'nyy chlen AN Armyanskoy SSR (for Mndzhoyan). 2. Labo-  
ratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Fatty acids) (Curarelike substances)

MNDZHOYAN, A.L.; DOKHIKYAN, A.A.

Investigation in the field of p-alkoxybenzoic acid derivatives.  
Part 12.  $\beta$ -dialkyl aminoethyl esters of p-( $\beta$ -alkoxyethoxybenzoic acids and their quaternary salts. Dokl. AN Arm. SSR 22 no. 2:71-76 '56. (MLRA 9:7)

1. Deystvitel'nyy chlen AN Armyanskoy SSR (for Mndzhoyan). 2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Anesthetics)

MNDZHOYAN, A.L.; DOKHIKYAN, A.A.

Research in the field of p-alkoxybenzoic acid derivatives.  
Report 13. Dokl. AN Arm. SSR 22 no. 3:111-117 '56. (MLRA 9:8)

1. Deystvitel'nyy chlen AN Armyanskoy SSR (Mndzhoyan); 2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Benzoic acid)

MNDZHOYAN, A.L.; MNDZHOYAN, O.L.; GASPARYAN, O.Ye.

Research in the field of simple amino esters. Report 1. Dokl.AN  
Arm.SSR 22 no.3:119-122 '56.  
(MLRA 9:8)

1. Deystvitel'nyy chlen AN Armyanskoy SSR (for A.L. Mndzhoyan);
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.

(Amino acids) (Esters)

Mndzhoyan, A.L.

USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4276

Author : Mndzhoyan, A.L., Mndzhoyan, O.L., Bagdasaryan, E.R.  
Inst : Academy of Sciences Arm. SSR

Title : Investigation of Derivatives of Dibasic Carboxylic Acids.  
Communication XV. Mixed Dialkylaminoethyl-Dialkylaminocal-  
kyl Esters of Succinic Acid.

Orig Pub : Izdat. AN ArmSSR, 1957, 22, No 4, 15, 216

Abstract : To determine the effect of various dialkylaminocalkyl substituents of succinic acid on the curare-like activity (duration and potency of action) compounds of the general formula  $R_2N(CH_2)_2CO(CH_2)_2CO(R')$  were synthesized (listin-R, R', yield in %, BP °C/mm, nD<sup>20</sup>, d<sub>4</sub><sup>20</sup>, MP °C of the salts, methyl iodide and ethyl iodide):

USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4276

$\text{CH}_3$ ,  $(\text{CH}_3)_2\text{N}(\text{CH}_2)_3$ , 51.8, 168-170/3, 1.443, 1.0179, -,  
 164-166, -,  $\text{C}_2\text{H}_5$ ,  $(\text{CH}_3)_2\text{N}(\text{CH}_2)_3$ , 39.4, 203-205/4, 1.447,  
 1.0038, -, -, -;  $\text{CH}_3(\text{CH}_3)_2\text{NCH}_2\text{CH}_2\text{CH}(\text{CH}_3)$ , 34.7, 156-  
 157/4, 1.446, 1.0171, 126-128, 150-152, 139-141;  $\text{C}_2\text{H}_5$ ,  
 $(\text{CH}_3)_2\text{NCH}_2\text{CH}_2\text{CH}(\text{CH}_3)$ , 35.79, 168-169/4, 1.448, 0.9945,  
 91-93, 133-135, -;  $\text{CH}_3$ ,  $(\text{CH}_3)_2\text{NCH}_2\text{CH}(\text{CH}_3)\text{CH}(\text{CH}_3)$ , 36.4,  
 164-166/4, 1.449, 1.0194, 108-110, 132-135, 179-181;  
 $\text{C}_2\text{H}_5$ ,  $(\text{CH}_3)_2\text{NCH}_2\text{CH}(\text{CH}_3)\text{CH}(\text{CH}_3)$ , 54.5, 173-175/4, 1.448,  
 0.9908, -, -, -;  $\text{CH}_3$ ,  $(\text{CH}_3)_2\text{NCH}_2\text{C}(\text{CH}_3)_2\text{CH}_2$ , 34.2,  
 - 31. -

Card 2/5

USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4276

$\text{C}_2\text{H}_5$ ,  $(\text{C}_2\text{H}_5)_2\text{N}(\text{CH}_2)_3$ , 60.6, 186-189/6, 1.447, 0.9971, -,  
 106-108, 148-150;  $\text{CH}_3$ ,  $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}_2\text{CH}(\text{CH}_3)$ , 46.15, 175-  
 178/2, 1.446, 0.9976, -, -, -;  $\text{C}_2\text{H}_5$ ,  $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}_2\text{CH}(\text{CH}_3)$ ,  
 80.98, 198-200/6, 1.443, 0.9661, 115-117, 133-135, -;  $\text{CH}_3$ ,  
 $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}(\text{CH}_3)\text{CH}(\text{CH}_3)$ , 57.6, 168-171/4, 1.455, 1.0187,  
 168-170, 235-237, 157-159;  $\text{C}_2\text{H}_5$ ,  $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}(\text{CH}_3)\text{CH}(\text{CH}_3)$   
 61.4, 182-185/4, 1.445, 0.9748, 128-130, 124-126, 154-156;  
 $\text{CH}_3$ ,  $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{C}(\text{CH}_3)_2\text{CH}_2$ , 64.2, 197-200/3, 1.442, 0.9781,  
 -, -, -;  $\text{C}_2\text{H}_5$ ,  $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{C}(\text{CH}_3)_2\text{CH}_2$ , 74.8, 190-193/3,

Card 4/5

- 33 -

MNDZHOYAN, A.L.; GRIGORYAN, A.A.

Research in the field of dibasic carboxylic acid derivatives.  
Report no. 16. Dokl.AN Arm.SSR 22 no.5:215-219 '56. (MLRA 9:9)

1. 1. Deystvit'nyy chlen AN Armyanskoy SSR. (for Mndzhoyan)
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.  
(Carboxylic acids)

MNDZHOYAN, A.L.; MNDZHOYAN O.L.; BAGDASARYAN, E.R.

Research on furan derivatives. Report 8. Dokl. AN Arm. SSR. 23  
no.4:175-181 '56. (MLRA 10:1)

1. Deystvitel'nyy chlen Akademii nauk Armyanskoy SSR (for A.L.  
Mndzhoyan) 2. Laboratoriya farmatsevticheskoy khimii Akademii nauk  
Armyanskoy SSR.

(Furan)

MNDZHOYAH, A.L.; AFRIKYAN, V.G.; OGAMESYAN, A.N.; PAPAYAN, G.L.

Investigations in the field of furan derivatives. Report no.9. Some  
amino esters of 5-aryl, aralkyloxymethyl furan-2-carboxylic acids.  
Dokl. AN Arm. SSR. 23 no.5:205-213 '56. (MLRA 10:2)

1. Deystvitel'nyy chlen Akademii nauk ArmSSR (for Mndzhoyan).  
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy  
SSR.

(Furan)

MINDZHOYAN, A. L.; DOWLATYAN, V. V.

5-aminomethyl-2-furoic acid. Sint. zeterechteid. v. et. no. 2;9-  
12 '57. (IR) 11:7,  
(Furoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.

2-benzylfuran. Sint. geterotsikl. soed. no. 2:17-1<sup>8</sup> '57.  
(MIRA 11:7)  
(Furan)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.

5-benzylfuroyl-2-thiosemicarbazide. Sint. geterotsikl. soed. no. 2:19-  
(MIRA 11:?)  
20 '57.  
(Semicarbazide)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.

5-benzylfurfuryl alcohol. Sint. geterotsikl. soed. no. 2:21-27  
(MIRA 11:7)  
'57.  
(Furfuryl alcohol)

MNDZHOYAN, A.L.; AGBALYAN, S.G.

Di-(5-carboxyfurfuryl)-sulfide. Sint. gaterotsikl. səsi. nö. 7:28-  
30 '57. (MERA 11:7)

(Furan)  
(Disulfide)

MIDZHOYAN, A.L.; GRIGORYAN, M.T.

2,3-dimethylfuran. Sint. heterotsikl. soed. no. 2:30-#1 '57.  
(MIRA 11:7)  
(Furan)

MEDZHOMAN, A.L.; GRIGORYAN, M.T.

4,5-dimethyl-2-furoic acid. Sint. vaterotsaikl. noei. no. 2:32-  
34 '57. (MIRA 11:7)  
(Furoic acid)

MNDZHOYAN, A.L.; GRIGORYAN, M.T.

5-methylfurfuryl alcohol. Sint. geterotsikl. soed. no. 2:53-54  
1957. (MIRA 11:?)  
(Furfuryl alcohol)

MNDZHOYAN, A.L.; TATEVOSYAN, G.T.

2-(2-furyl)-1,3,4-oxadiazo-5-thiol. Sint. geterotsikl. soei.  
no. 2:60-63 '57. (MIRA 11:7)  
(Thiols)

MARDZHOYAN, A.L.; DOKHIKYAN, A.A.

Furfurylamine. Sint. gaterotsikl. soed. no. 2:67-70 '57.

(MIRA 11:7)

(Furfurylamine)

MNDZHOYAN, A.L.; AFRIKYAN, P.G.; DOKHIKYAN, A.A.

Furfurylbenzylamine. Sint. geterotsikl. soed. no. 2:71-73 '57.  
(MIRA 11:7)

(Furfurylamine)

MNDZHOYAN, A.L.; DIVANYAN, N.M.

5-furfurylmercaptoethyl-2-furoic acid. Sint. heterotsikl. soed.  
no. 2:76-79 '57. (MIRA 11:7)  
(Furoic acid)

MIDZHOYAN, A.L.; AFRIKYAN, V. . .

Chloroanhydride of 5-bromo-2-furoic acid. Sint. retorotsakl. soed.  
no. 2:82-83 '57. (MIRA 11:2)  
(Furoic acid)

MNDZHOYAN, A.L.; PAPAYAN, G.L.

Chloroanhydride of 5-propoxymethyl-2-furoic acid. Sint. geterotsikl.  
soed. no. 2:83-84 '57. (MIRA 11:7)  
(Furoic acid)

MNDZHOYAN, A.L.; AROYAN, A.A.

Ethyl ester of 5-(*d*-chloroethyl)-2-furoic acid. Sint. Peterotsink.  
soed. no. 2:85-87 '57. (MIRA 11:7)  
(Furoic acid)

MINDIKIAN, A.L.; AROYAN, A.A.

5-ethyl-2-furoic acid. Sint. heterotsikl. soed. no. 2;22-91 '57.  
(Furoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.

Investigating a series of amides with pyridine and thiazole rings.  
Izv. AN Arm. SSR Ser. khim. nauk 10 no.2:143-157 '57. (MIRA 10:12)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Amides)

MEDZHOTIAN, A.L.; AROYAN, A.A.

Bischloromethylation of alkoxybenzenes and utilization of obtained products in certain syntheses. Izv. Akad. SSR Ser. khim. nauk 10 no.3:203-212 '57. |  
(MIRA 10:12)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Benzene) (Chemistry, Organic--Synthesis)

MNDZHAYAN, H.L.

MNDZHAYAN, A.L.; TATEVOSYAN, G.T.; DIVANYAN, N.M.

Investigating the field of derivatives of substituted acetic acids.  
Report No.10: Dialkylaminoethyl esters of  $\beta$ -alkylmercaptoethyl-  
benzylacetic acid. Izv. AN Arm. SSR Ser. khim. nauk 10 no.4:267-  
276 '57. (MIRA 10:12)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Acetic acid)

MNDZHOYAN, A. L.; TATEVOSYAN, G.T.; EKMEKDZYAN, S.P.

Substituted hydrazides of  $\beta$ -(2-methylindolyl-3)-propionic acid.  
Izv. AN Arm. SSR Ser. khim. nauk 10 no.4:291-298 '57. (MIRA 10:12)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Hydrazides) (Propionic acid)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820006-6"

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; DOKHIKYAN, A.A.

Synthesis of 1,2,4 - triazole derivatives. Report No.1: Some 3-  
(p - alkoxyphenyl) - 5- mercapto- 1,2,4-triazoles. Izv. AN Arm.  
SSR. Ser. khim. nauk v.10 no.5:357-362 '57. (MIRA 11:1)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Triazole)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; DOKHIKYAN, A.A.

Synthesis of 1,2,4-triazole derivatives. Report No.2: Some 3-(*p*-alkoxyphenyl)-5-alkylmercapto-1,2,4-triazoles. Izv. AN Arm. SSR. Ser. khim. nauk v.10 no.5:363-368 '57. (MIRA 11:1)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Triazole)

MNDZHOYAN, A.L.: AFRIKYAN, V.G.; BADALYAN, V.Ye.

Synthesis of 1,2,4-triazole derivatives. Report No. 3: Synthesis of 3-(2'-furyl)-5-alkylmercapto-1,2,4-triazoles. Izv. AN Arm. SSR ser. khim. nauk 10 no.6:421-425 '57. (MIRA 11:6)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Triazole)

Mardzoyan, R. I.

luran derivatives. I. Synthesis of some 5-Alkylmercaptofuran-2-carboxylic acids and their esters.  
A. L. Minasyan and N. M. Charmandarian. *Doklady Akad. Nauk Armenia*, v. 3, p. 107-112 (1957); cf. *C.A.* 51, 6000 (1957). DTA. PhMe (100 ml.) and 0.26 g. atom Na is heated until the Na is melted, stirred 10-15 min. (the temp. drops 40-50°), at this temp. 0.33 mole freshly distilled alkylmercaptan added dropwise, the mixt. let stand a few hrs., 0.26 mole Et 5-chloromethylfuran-2-carboxylate added dropwise over 2-2.5 hrs., heated at 90-95° 2 hrs., cooled, transferred to a separatory funnel, washed 3-3 times with H<sub>2</sub>O, dried with NaSO<sub>4</sub>, the solvent removed, and the residue distd. *in vacuo* gave Et 5-alkylmercaptomethylfuran-2-carboxylate (II). Recryst. with 10% NaOH soln. to the acid. Acids prep'd. were (R, % yield, and m.p. given): Me, 87.2, 81-82°; Et, 84.4, 88-89°; Pr, 99-78°; iso-Pr, 98, 98°; Bu, 95, 90°; iso-Bu, 94.8, 76°; pentyl, 98.5, 67°; MeCH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, 98, 64°. The corresponding esters (% yield, b.p./mm., *d*<sub>4</sub><sup>20</sup>, *M.R.* given): Et, 120°/5, 1.1640, 1.6350, 52.61; 22.8, 125°/5, 1.1320, 1.5180, 57.31, 74.8, 139°/5, 1.1180, 1.5103, 81.06; Et, 130°/5, 1.0950, 1.000, 61.27, 94, 143-4°/5, 1.0888, 1.5000, 60.45, 85.2, 140°/5, 1.0330, 1.5103, 65.14; iso-Pr, 140°/5, 1.0740, 1.5030, 79.59, 70, 160°/5, 1.0620, 1.5110, 71.5. M. Charmandarian

MNdz hoy A.C.

Bisulfite  $\text{Et}_3\text{d}/\text{Et}_2\text{O}$

Furan derivatives. XI. Synthesis of some ethers of 5-dialkylaminomethylfuran-2-carboxylic acid salts. A. I. Minskaya, V. I. Arlikyan, and M. T. Ovchinnik. *Doklady Akad. Nauk Armyan. S.S.R.* 24, 73-7 (1957) (in Russian); cf. *C.A.*, 51, 12841. — Et 5-chloromethylfuran-2-carboxylate (0.1 mole) in 80 ml. abs.  $\text{C}_2\text{H}_5$  treated with 0.2 mole  $\text{Et}_3\text{NH}$  in 80 ml. abs.  $\text{C}_2\text{H}_5$ , the mixt. heated 4-5 hrs. on an oil bath, enough 10% HCl added to render the mixt. acid to Congo red, the  $\text{H}_2\text{O}$  layer treated with  $\text{Na}_2\text{CO}_3$ , ext'd. with  $\text{Et}_2\text{O}$ , and the  $\text{Et}_2\text{O}$  soln. dried and evapd. gave Et 5-(diethylaminomethyl)furan-2-carboxylate (I),  $b.p.$  112-14°. Quaternary ammonium salts were prep'd. from I with excess alkyl iodide in abs.  $\text{Et}_2\text{O}$ . Werner Jacobson.

OM

KNDZHOYAN, A.L.; AFRIKYAN, V.G.; OGANESEYAN, A.N.

Research in the field of alkoxylbenzoic acid derivatives.  
Report No. 14. Dokl.AN Arm.SSR 24 no.3:105-117 '57. (MLBA 10:5)

1. Akademik Akademii nauk Armyanskoy SSR (for Afrikyan).  
(Benzoic acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; GRIGORYAN, M.T.

Research in the field of furan derivatives. Dokl. Ak Arm.SSR 24  
no.5:207-217 '57.  
(MLRA 10:7)

1. Akademik Akademii nauk Armyanskoy SSR (for Mndzhojen).  
(Furan)

MNDZHUVAN, A.L.

Dikteri: Lek.

Derivatives of substituted acrylic acids. IX.  $\alpha$ -Bromoalkylaminoethyl and  $\gamma$ -dimethylaminomercapto esters of dialkylphenylacetic acids. A. I. Mdzhevyan, G. T. Tateryan, and S. G. Agbabyan. Dostroy. Akad. Nauk Armeas. S.S.R. Zb. No. 1, 11-24 (1967) (in Russian); cf. C.A. 60, 112814. — The following tri-substituted acrylic acids were prepd. for pharmaceutical testing. Dialkylacetic acid (1.5 moles) and 0.5 g. red P was refluxed on an H<sub>2</sub>O bath (then 3 moles Br slowly added (in case of decoloration of the mixt. 10-15 ml. addnl. Br was added) and the mixt. heated 3-4 hrs., kept overnight, poured into boiling H<sub>2</sub>O, stirred, boiled 1-2 hrs., cooled, extd. with Et<sub>2</sub>O, washed, dried, and after distn. of the solvent the residue vacuum distd. giving BrCR'R''CO<sub>2</sub>H (I) (R', R'' b.p./mm.,  $d_{4}^{20}$ , MR, and % yield given): Me, Bu, 128-30°/5, 1.3246, 1.4730, 44.27-73; Pr, Pr, 128-30°/6, 1.3073, 1.4760, 48.13, 80; Pr, Bu, 130-3°/3, 1.2693, 1.4710, 62.65, 80.5. To 0.66 mole I in 600 ml. dry CuI, after cooling and stirring 1.76 g. AlCl<sub>3</sub> in small portions was added, the mixt. heated on the H<sub>2</sub>O bath 15 hrs., cooled, H<sub>2</sub>O added slowly and 1:1 HCl until soln. of the ppt., the C<sub>6</sub>H<sub>6</sub> layer sepd., washed with dil. HCl and H<sub>2</sub>O, (twice agitated with 100 ml. 20% NaOH, the H<sub>2</sub>O layer extd. with Et<sub>2</sub>O to remove impurities, acidified with HCl to Congn red, and the oil extd. with Et<sub>2</sub>O, dried and distd. *in vacuo* giving PhCR'R''CO<sub>2</sub>N (II) (R', R'', b.p./mm.,  $d_{4}^{20}$ , MR, and % yield given): Me, Pr, 148°/3, 1.0403, 1.5000, 58.15, 34.1; Me, Bu, 162-4°/7, 1.0300, 1.6082, 0.21, 38.0; Et, Pr, 151-4°/3, 1.0211, 1.5036, 59.75, 43; Bu, Bu, 160-6°/1, 1.0003, 1.6026, 94.40, 46.0; Pr, Pr, 167°/5, 1.0003, 1.5010, 04.40, 30.2; Bu, Bu, 170°/4, 0.9837, 1.1989, 74.04, 35.0; Pr, Bu, 160°/1, 0.9661, 1.5010, 09.40, 34.4; II (0.25 mole) in 100 ml. abs. CuI<sub>4</sub> with 0.3 mole SOCl<sub>2</sub> refluxed on the H<sub>2</sub>O bath

A. L. MNUZHONYAN, G. T. TATEVOSYAN

8 hrs. gives after vacuum distn. PhCR'R'COCl (III) (R', R'', % yield, b.p./mm., d<sub>40</sub>, n<sup>D</sup>, MR given): Me, Pr, 97.1, 108-09°/6, 1.0500, 1.4080, 50.28; Me, Bu, 62.0, 120-22°/6, 1.0470, 1.5070, 63.83; Et, Pr, 90.5, 107-00°/5, 1.0498, 1.5076, 63.74; Et, Bu, 90.0, 134-38°/7, 1.0331, 1.5030, 68.31; Pr, Pr, 90.0, 138°/7, 1.0336, 1.5030, 68.32; Pr, Bu, 92.2, 145°/5, 1.0190, 1.4990, 73.12; Bu, Bu, 90.5, 140-42°/3, 1.0103, 1.5000, 77.02. III (0.05 mole) in 100 ml. abs. C<sub>6</sub>H<sub>6</sub> reduced with 0.05 mole dialkylaminoalkylalcohol in 50 ml. abs. C<sub>6</sub>H<sub>6</sub> heated on an H<sub>2</sub>O bath 8-10 hrs. then treated with satd. Na<sub>2</sub>CO<sub>3</sub> soln., exd. with Et<sub>2</sub>O dried, and distd. *in vacuo* gives PhCR'R''CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>. The following PhCR'R''CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub> were prep'd. (R', R'', % yield, b.p./mm., d<sub>40</sub>, n<sup>D</sup>, and MR given): Me, Me, 61.6, 122°/5, 1.0027, 1.4950, 68.43 (HCl salt, m. 101°; methiodide, m. 132°; ethiodide, m. 150°; citrate, m. 93°); Me, Et, 63.1, 132°/4, 0.9910, 1.4038, 73.21 (HCl salt, m. 93-4°; methiodide, m. 129°; citrate, m. 101°); Me, Pr, 73.0, 147°/4, 0.9770, 1.4882, 77.01 (methiodide, m. 107°; citrate, m. 106-7°); Me, Pa, 80.0, 163-4°/6, 0.9728, 1.4803, 82.82 (methiodide, m. 92°); Et, Pr, 77.8, 148-0°/4, 0.9808, 1.4803, 82.80 (citrate, m. 140°); Et, Bu, 79.0, 160-1°/3, 0.9638, 1.4868, 80.93 (methiodide, m. 135°; ethiodide, m. 112°; citrate, m. 115°); Pr, Pr, 81.1, 155-8°/4, 0.9638, 1.4868, 86.93 (HCl salt, m. 73°; methiodide, m. 135°; ethiodide, m. 117°; citrate, m. 132°); Pr, Bu, 79.2, 173-4°/5, 0.9630, 1.4860, 91.04 (citrate, m. 70°); Bu, Bu, 88.0, 179°/4, 0.9614, 1.4862, 96.44 (methiodide, m. 101°; citrate, m. 106°). For PhCR'R''CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>: Me, Pr, 79.9, 159°/5, 0.9680, 1.4880, 86.84 (HCl salt, m. 83°; ethiodide, m. 96°; citrate, m. 106-10°); Me, Bu, 76.4, 183-5°/7, 0.9630, 1.4833, 91.88 (citrate, m. 118°); Et, Pr, 81.5,

2/3

A.L. MNDZHOYAN, G.T. TATEVOSIAN

183-4°/5, 0.0041, 1.4102, 91-1 (HCl salt, m. 02°; citrate, m. 100°); Et, Bu, 85.6, 167°/4, 0.9550, 1.4300, 90.26 (ethiodide, m. 118°; citrate, m. 107-9°); Pr, Pt, 36.5, 130-2°/4, 0.9559, 1.4350, 90.21 (HCl salt, m. 107-8°; ethiodide, m. 116°; citrate, m. 108°); Pr, Bu, 82.6, 133°/5, 0.9646, 1.4308, 100.2 (citrate, m. 133°); Bu, Bu, 81.5, 187-90°/5, 0.9405, 1.4877, 105.38 (citrate, m. 92°). For PhCR'R"CO<sub>2</sub>(CH<sub>3</sub>)<sub>2</sub>NMe<sub>2</sub>, Me, Me, 73.8, 120°/4, 0.9004, 1.4016, 72.84 (HCl salt, m. 128°; methiodide, m. 110°; ethiodide, m. 98°; citrate, m. 180°); Me, Et, 77.5, 173-4°/0-7, 0.0428, 1.4930, 77.87 (HCl salt, m. 113-15°; methiodide, m. 132°; citrate, m. 70-80°); Me, Pr, 80.1, 100°/5, 0.9606, 1.4370, 82.28 (methiodide, m. 82°; citrate, m. 88°); Me, Bu, 84.6, 160-7°/12, 0.0172, 1.4836, 80.74 (citrate, m. 01°); Et, Et, 83.9, 165-6°/4, 0.9748, 1.4900, 82.20 (HCl salt, m. 90-100°; methiodide, m. 128°; ethiodide, m. 112°; citrate, m. 117°); Et, Pr, 88.4, 178-80°/9, 0.9608, 1.4885, 86.01 (methiodide, m. 103°; citrate, m. 111°); Et, Bu, 78.0, 163-7°/0, 0.9534, 1.4870, 92.12 (HCl salt, m. 79°; citrate, m. 85°); Bu, Bu, 89.7, 191°/5, 0.9470, 1.4816, 104.13 (citrate, m. 81°). The following PhCR'R"CO<sub>2</sub>(CH<sub>3</sub>)<sub>2</sub>NMe<sub>2</sub>, Me, Me, 75.2, 141°/4, 0.9750, 1.4800, 82.05 (HCl salt, m. 87-8°; methiodide, m. 69°; ethiodide, m. 103°; citrate, m. 97°); Me, Et, 79.1, 181-2°/5, 0.0812, 1.4040, 80.49 (HCl salt, m. 88°; citrate, m. 100-1°); Me, Pr, 78.0, 176-0°/5, 0.9624, 1.4855, 91.18 (methiodide, m. 128°; ethiodide, m. 97°; citrate, m. 86°); Me, Bu, 90.5, 175-8°/6, 0.9057, 1.4000, 98.84 (citrate, m. 100°); Et, Et, 73.5, 160-2°/4, 0.0763, 1.4923, 90.88 (citrate, m. 102-3°); Et, Pr, 80.6, 173-8°/5, 0.9705, 1.4904, 95.20 (citrate, m. 104-5°); Et, Bu, 78.4, 178-81°/4, 0.9651, 1.4875, 100.49 (citrate, m. 118°); Pr, Pr, 81.0, 175-6°/4, 0.9617, 1.4888, 100.95 (citrate, m. 117°); Pr, Bu, 78.0, 180-91°/5, 0.9490, 1.4877, 105.80; Bu, Bu, 92.1, 193-4°/4, 0.9466, 1.4875, 109.93 (citrate, m. 116°).

4  
4

BM

3/3

N.C.

MNDZHOYAN, A. L., akademik; AFRIKYAN, V.G.

Research in the field of furan derivatives. Report . . . Dokl. AN  
Arm. SSR 25 no.4:201-205 1957. (MIHA 11:2)

1. AN ArmSSR (for Mndzhoyan). 2. Institut tonkoy organicheskoy khimii  
AN ArmSSR.  
(Furan)

MNDZHOYAN, A.L., akademik; TATEVOSYAN, G.T.; AGBALYAN, S.G.; DIVANYAN, N.M.

Research in the field of furan derivatives. Report No.16. Dokl. AN  
Arm. SSR 25 no.4:207-211 '57. (MIRA 11:2)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Furan)

MNDZHOMAN A.

KAZGIN, VA  
5(3) P-4 PHASE I BOOK EXPLOITATION SOV/1589

Akademika nauk SSSR.

*Khimiya bol'shikh molekul' sbornik statey (Chemistry of Large Molecules)* Collection of Articles Moscow Izd-vo Akademii Nauk SSSR. Nauchno-populyarnaya seriya) 269 p. (series Akademika nauk SSSR. Nauchno-populyarnaya seriya) 30,000 copies printed.

Compiler: G.V. Skorobogat'ya; Resp. Ed.: A.V. Topchilov; Academician: V.A. Boparkit'ya; Tech. Ed.: I.B. Guseva.

PURPOSE: This book is intended for a wide circle of readers including those who have had no training in chemistry. It can also serve as a manual for propagandists, teachers, and journalists.

Chemistry of Large Molecules (Cont.) SOV/1589

CONTENTS: This collection of articles reflects the trend for the future development of the Soviet chemical industry as indicated by the May plenary session of the Central Committee of the Communist Party within the framework of the New Seven Year Plan. These articles were published in newspapers and journals. The authors, scientists and industry workers, developed the theme of accelerated development of the chemical industries, and sciences with stress on the manufacture of synthetic fibers, plastics and other materials. Some of the articles were abridged, revised, or enlarged. The articles were selected so as to give an adequate survey of the chemistry and technology of high-molecular-weight compounds and their uses in industry, agriculture, and in the manufacture of consumer goods. Mentioned are raw materials for the production of polymers. This book belongs to the popular-science series of the Academy of Sciences. Similar volumes are intended for future publication. No references are given.

TABLE OF CONTENTS:

Preface

	SOV/1589
Chemistry of Large Molecules (Cont.)	
Vorontsov, R.S. Give Wider Scope to Research	235
Mndzhoman A. Prospects for the Development of the Chemistry of Synthetics in Armenia	237
Ryurikov, A.A. Develop the Chemistry of Shale	262
Favlyuchenko, R.R. The Task Which Awaits You	265
Nekrasik, V.Ye. Utilization of Peat in Chemistry	269
Zaiktarov, V.O., N. Litvinenko, S. Aronov, and P. Sest. One More Source of Chemical Raw Materials	272
Gusarov, Eh. U. Wonders of the Macromolecule	275
Dykov, V. I. and Ye. Ornigov. Prospects for the Development of the Chemical Industry in the Far East	280

Card 7/8

MNDZHOYAN, A.L.;AROYAN, A.A.

5-Benzylmercaptomethyl-2-furancarboxylic acid. Sint. heterotsikl.  
soed. no.3:9-12 '58  
(Furoic acid)

(MIRA 13:3)

MNDZHOYAN, A.L.;GRIGORYAN, M.T.

*S-Benzylfurfurole. Sint. geterotsikl. soed. no.3:13-15 '58*  
*(Furaldehyde) (MIRA 13:3)*

MNDZHOYAN, A.L.; OGANDZHANYAN, N.M.

2,5-bis(dipropylaminomethyl)furan. Sint. geterotsikl. soed. no.3:  
16-18 '58  
(Furan)

MNDZHOYAN, A.L.; DIVANYAN, N.M.

5-butylmercaptomethylfurfuryl alcohol. Sint. geterotsikl. soed.  
no. 3:19-21 '58  
(Furfuryl alcohol) (MIRA 13:3)

MNDZHOYAN, A.L.;AGBALYAN, S.G.

Diamide of bis(5-carboxyfurfuryl) sulfide. Sint. heterotsikl. soed.  
no.3:22-23 '58  
(Sulfide)

MNDZHOYAN, A.L.; MARKARYAN, E.A.

Bis-(5-carbomethoxy-2-tetrahydrofuryl)methane. Sint. geterotsikl.  
soed. no. 3:24-26 '58  
(Methane) (MIRA 13:3)

MNDZHOYAN, A.L.; BADALYAN, V.Ye.

Bis(5-carboxy-2-furyl)methane. Sint. geterotsikl. soed. no.3:27-29  
'58 (MIRA 13:3)  
(Methane)

MNDZHOYAN, A.L.;GRIGORYAN, M.T.

4,5-dimethylfurfurole. Sint. geterotsikl. soed. no.3:30-32 '58  
(Furaldehyde) (MIRA 13:3)

MNDZHOYAN, A.L.; DOKHIKYAN, A.A.

2,5-bis(oxymethyl)furan. Sint. heterotsikl. soed. no. 3:33-35  
(Furan)  
(MIRA 13:3)

MNDZHOYAN, A.L.; BAIALYAN, V.Ye.

2,2'-difurylmethane. Sint. heterotsikl. soed. no. 3:35-36-152 (MIDA. 3:3)

MNDZHOYAN, A.L.

Diethylamide of 2-furancarboxylic acid. Sint. geterotsikl. soed.  
no.3:37-39 '58 (MIRA 13:3)  
(Furoic acid)

MNDZHOYAN, A.L.; GRIGORYAN, M.T.

5-Diethylaminomethyltetrahydrofurfuryl alcohol. Sint. geterotsikl.  
soed. no.3:39-41 '58  
(Furfuryl alcohol) (MIRA 13:3)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820006-6

MNDZHOYAN, A.L.; AROYAN, A.A.

5-Carboxyfurfurylmercaptoacetic acid. Sint. geterotsikl. soed.  
no. 3:43-45 '58  
(Acetic acid) (MIR 13:3)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820006-6"

MNDZHOYAN, A.L.; MARKARYAN, E.A.

$\alpha$ -Methyl- $\beta$ -(5-methyl-2-furyl)allyl alcohol. Sint. geterotsikl.  
soed. no. 3:45-46 '58  
(Propenol) (MIRA 13:3)

MNDZHOYAN, A.L.; DOVIATYAN, V.V.

Methyl ester of 5-formyl-2-furancarboxylic acid. Sint. heterotsikl.  
soed. no.3:47-49 '58  
(Furoic acid) (MIR 13:3)

MNDZHOYAN, A.L.; TARKHANYAN, Z.K.

5-Methylfurfural acetone. Sint. zeterotsikl. soed. no. 3:50-52 '58  
(Mika 13:3)

APPROVED

MNDZHOYAN, A.L.; TARKHANYAN, Z.K.

5-Methylfurfuryl acetone. Sint. zeterotsikl. soed. no. 3:53-54 '58.  
(Mika 13:3)

MINDZHUYAN, A.L.; GRIGORYAN, M.T.

5-Methyl-2-furfurylpyridylamine. Sint. heterotsikl. soed. no.3:  
55-57 '58  
(Pyridine) (MIRA 13:3)

MNDZHOYAN, A.L.; AGHALYAN, S.G.

5-Nitrofurfuryl alcohol. Sint. heterotsikl. ced. no. 3:58-<sup>13</sup>:11,<sup>12</sup>  
(Furfuryl alcohol) (MIRA 13:3)

MNDZHOYAN, A.L.; AROYAN, A.A.

5-Oxymethyl-2-furancarboxylic acid. Sint. heterotsikl. acid. no. 3:  
61-64 '58  
(Furoic acid) (MIR 13:3)

APPROVED FOR RELEASE

MNDZHOYAN, A.L.; MARKARYAN, E.A.

5-n-Tolylmethyl-2-furancarboxylic acid. Sint. heterotsikl. acid.  
no. 3:67-69 '58  
(Furoic acid) (MIR 13:3)

MNDZHOYAN, A.L.; MARKARYAN, Z.A.

5-n-Tolylmethylfurfurole. Sint. zeterotsikl. soed. no. 3:26-72 '58  
(Furaldehyde)  
(MIRA 13:3)

MNDZHOYAN, A.L.; MARKARYAN, Z.A.

N-Tolyl-2-furylmethane. Sint. heterotsikl. soed. no. 3:72-73 '58  
(MIR 13:3)

MNDZHUYAN, A.L.; PAPAYAN, G.L.

2-Furyl phenyl ketone (benzylfuran). Sint. geterotsikl. soed. no. 3;  
74-75 '58 (Ketone) (MIKA 13:3)

MNDZHOYAN, A.L.;AROYAN, A.A.

$\beta$ -Furfuryloxypropionitrile. Sint. geterotsikl. soed. no. 3:28-20  
'58 (Propionitrile) (MIRA 13:3)

MNDZHOYAN, A.L.; MARKARYAN, E.A.

Ethyl ester of  $\alpha$ -methyl- $\beta$ -(5-methyl-2-furyl) acrylic acid.  
Sint. geterotsikl. soed. no. 3:83-85 '58 (MIKA 13:3)  
(Furanacrylic acid)

SEARCHED INDEXED  
AUTHOR: g

TITLE: Anniversary Session of the Department  
of Chemical Sciences of the USSR Academy of Sciences, Sevastopol, and the Institute for Chemical Sciences on October 1 and 2, 1977. (Telegraph report of the Press Bureau of the All-Union Scientific Society of Chemists, published in "Chemical News," No. 1, 1978.)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdelenie Khimicheskikh Nauk, Tr. 4, No. 521 - 524 (1978)

ABSTRACT: On the occasion of the 50th anniversary of the October Revolution a session meeting of the Department for Chemical Sciences of the AS USSR took place. In his opening speech N. N. Semenov pointed out the outstanding success of the USSR in the field of sciences, especially in that of chemistry. Scientific lectures at the sessions were held by the following scientists, as was mentioned earlier: Khunyants, Member, Academy of Sciences, and A. V. Fomin on the "Nitration of Fluorides"; A. I. Makhogam, Doctor, AS Aronian SSSR,

Card 1/4

1978

**Anniversary Session of the Department for Chemical Sciences of the Academy of Sciences of the USSR, of the Department for Chemical Sciences, On October 10 and 11,**

on the "Investigation of the Mechanism of Physiological Activity of Compounds", R. M. Freudenthal, Doctor of Chemical Sciences, reported "Investigation of the Telemerization Reactions and the Mechanism of the Synthesis on the Basis of Tri-alkyl(Heptadecyl 2,4,6,8-Dodecyl) Free Radicals in Solutions and the Application of Model Systems," A. M. Fradkin, Member of the Academy of Sciences, reported on "Some Problems of the Theory of Electromechanical Properties and the Theory of Ion Reactions" (Review); A. A. Dolgopolski, Kiselev, Doctor of Chemical Sciences (Review); V. G. Gor'kov, Doctor of Chemical Sciences, reported "Investigations in the Field of the Structure of Polymers", V. L. Tikhonov, Doctor of Chemical Sciences, reported "Investigations of Ionizing Radiation", A. A. Kuklin, Doctor.

Card 2/4

1977

**Anniversary Session of the Department for Chemical Sciences of the Academy of Sciences of the USSR, of the Department for Chemical Sciences, On October 10 and 11,**

Academy of Sciences, new research results were developed by the following scientists: I. V. Tikhonov, Professor of Chemical Sciences, reported "Investigations of the Structure of Polymers"; R. M. Freudenthal, Doctor of Chemical Sciences, reported "Investigations of the Mechanism of the Synthesis of Polymers"; V. A. Slobodin, Doctor of Chemical Sciences, reported "Investigations of the Mechanism of the Synthesis of Polymers"; General I. I. Kabanov, Professor of Chemical Sciences of the AS USSR, reported "Investigations of the Structure of Polymers"; A. I. Tsvetkov, Doctor of Chemical Sciences, reported "Investigations of the Mechanism of the Synthesis of Polymers"; I. M. Sosulin, Doctor of Chemical Sciences, reported "Investigations of the Mechanism of the Synthesis of Polymers"; A. V. Zelenin, Doctor of Chemical Sciences, reported "Investigations of the Mechanism of the Synthesis of Polymers"; A. A. Kuklin, Doctor of Chemical Sciences, reported "Investigations of the Mechanism of the Synthesis of Polymers".

Card 3/4

Anniversary Session of the Department for Chemical Sciences of the Academy of Sciences of the USSR, Institute of the Department for Chemical Sciences of the USSR, Moscow, On 10th April and 11th April.

Electrochemical Hall effect was investigated in the Chemical Analysis Methods of the Materials of Inorganic Elements", I. A. Alimarin, G. Krasnopol'skii, M. N. Moshler, AGU, 1977, pp. 100-102. The method of determination of the concentration of rare elements using radioactive trivalent lanthanides and telluride glass, V. D. Levchenko, Doctor of Chemical Sciences, reported at the "Methods of Determination of Metals in Industrial Reactions in Electrolytic Cells", 1977, pp. 100-102, all in white ink. 3 vols.

AVAILABLE: Library of Congress

1. Chemical industry—USSR

Card 4, 4

MNDZHOYAN, A.L.; AROYAN, A.A.

Study of benzofuran derivatives. Report no.1: Chloromethylation of benzofuran-2-carboxylic acid esters and the use of the obtained products in other synthesis. Izv. AN Arm. SSR khim. nauk 11 no.1: 45-56 '58. (MIRA 11:6)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.  
(Benzofuran) (Chlorination) (Methylation)

MNDZHOYAN, A.L.; TATEVOSYAN, G.T.; TERZYAN, A.G.; EKMEKDZHYAN, S.P.

Indole derivatives. Report No.2: 2-[ $\beta$ -alkyl- $\beta$ (2'methyl-3'indolyl)]- $\alpha$ ethyl-5-mercanto-1,3,4-diazole. Izv.AN Arm.SSR. Khim.nauki 11 no.2:127-133 '58. (MIRA 11:11)

1. Institut tenkoy organiceskoy khimii AN ArmSSR.  
(Oxadiazole)